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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,170	04/09/2004	Akihiko Chiba	108421-00096	8399

4372 7590 09/19/2005  
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EXAMINER

MORILLO, JANEL COMBS

ART UNIT	PAPER NUMBER
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1742

DATE MAILED: 09/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/821,170	<b>Applicant(s)</b> CHIBA ET AL.	
	<b>Examiner</b> Janelle Combs-Morillo	<b>Art Unit</b> 1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 July 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 5-10 and 17-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 11-16 and 23-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 11-16, and 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stinson (US 5,891,191).

Stinson teaches a Co-Cr-Mo alloy fine wire with a diameter between 0.025-0.500 mm (25-500µm) for an implantable medical device (column 3 line 32), said alloy comprising (in wt%): 26-31% Cr, 4-8% Mo, <2% Ni, balance Co (column 3 lines 42-45).

Concerning the degree of roundness (cl. 1, 4, 15, 16), Stinson teaches that filaments #12 (wires) of said Co alloy are substantially homogeneous in cross section (see Fig. 3, column 5 lines 5-7). Concerning the concentration ratio of Mo, Cr, or Co (cl. 1-3), Stinson teaches the composition of said wires are also substantially homogeneous (column 5 lines 9-10). Therefore it is held that Stinson meets the instant limitations of degree of roundness and concentration ratio.

Overlapping ranges have been held to be a prima facie case of obviousness, see MPEP § 2144.05. It would have been obvious to one of ordinary skill in the art to select any portion of the range, including the claimed range, from the broader range disclosed in the prior art, because the prior art finds that said composition in the entire disclosed range has a suitable utility. Because Stinson teaches a Co alloy wire with alloying ranges that overlap or touch the boundary of the

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presently claimed alloying ranges, it is held that Stinson has created a prima facie case of obviousness of the presently claimed invention.

Concerning claims 11-14 and 23-26, Stinson teaches said alloy wire is woven to form a lattice structure (column 4 lines 8-11, Fig.1), thereby forming a stranded cable with a tubular cross section. Though Stinson does not specify a planar profile/body, it would have been within the scope of Stinson to form a planar edge of said stranded cable. The limitation “planar body” does not patentably distinguish the claimed Co-Cr-Mo alloy woven wire from the prior art’s Co-Cr-Mo alloy wire woven into a substantially tubular body (see MPEP 2144.03).

Concerning claim 15, which mentions said Co alloy wire has an internal structure of gamma phase or epsilon phase only, or both of them only, the examiner asserts that “products of identical chemical composition can not have mutually exclusive properties.” *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). A chemical composition and its properties are inseparable. Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). Therefore, if the prior art teaches a substantially identical chemical structure, the properties applicant discloses and/or claims (such as alloy phases) are necessarily present. See MPEP 2112.01.

3. Claims 1-4, 11-16, and 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stinson (US 5,891,191) in view of JP 2002-363675A (JP’675). Stinson is discussed in paragraphs above.

Concerning the instant range of Mo, as stated above, Stinson teaches a maximum of 8wt%. However, JP'675 teaches higher Mo (up to 12%, see abstract, etc) is useful for corrosion and abrasion resistance (see [0004]). It would have been obvious to one of ordinary skill in the art to increase the Mo content of the Co-Cr-Mo alloy taught by Stinson, because JP'675 teaches higher Mo (up to 12%, see abstract, etc) is useful for corrosion and abrasion resistance (see [0004]).

For other limitations of the instant claims, see discussion of Stinson in paragraphs above.

#### ***Response to Arguments***

4. In the response filed on July 1, 2005, applicant submitted various arguments traversing the rejections of record.

Applicant's argument that the present invention is allowable over the prior art of record because the prior art does not teach a) an uniform concentration of Mo or b) the presence of the instant phase structure, has not been found persuasive. As stated above, the alloy wire taught by Stinson overlaps the presently claimed alloying ranges and wire diameter, and Stinson teaches the composition of said wires are also substantially homogeneous. The same phases are therefore expected to occur (see also discussion above). Therefore, because the alloy product taught by Stinson substantially overlaps the alloying ranges and appears to be substantially the same as the instant product, it is held that Stinson has created a prima facie case of obviousness of the presently claimed invention.

Once a reference teaching product appearing to be substantially identical is made the basis of a rejection, and the examiner presents evidence or reasoning tending to show inherency, the burden shifts to the applicant to show an unobvious difference. "[T]he PTO can require an

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applicant to prove that the prior art products do not necessarily or inherently possess the characteristics of his [or her] claimed product. Whether the rejection is based on inherency' under 35 U.S.C. 102, on prima facie obviousness' under 35 U.S.C. 103, jointly or alternatively, the burden of proof is the same...[footnote omitted]." The burden of proof is similar to that required with respect to product-by-process claims. In re Fitzgerald, 619 F.2d 67, 70, 205 USPQ 594, 596 (CCPA 1980) (quoting In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433-34 (CCPA 1977)), see MPEP 2112. In In re Schreiber, 128 F.3d 1473, 1478, 44 USPQ2d 1429, 1432 (Fed.Cir.1997). Applicant has not clearly shown an unobvious difference between the instant invention and the prior art's product.

Applicant's argument that the present invention is allowable over the prior art of record because the instant product has improved structure and ductility when produced by the melt spinning methods of the instant invention has not been found persuasive. The instant claims are drawn to an Co-Cr-Mo alloy product, and applicant has not clearly shown specific unexpected results with regard to the prior art of record. Applicant has not clearly shown specific unexpected results with respect to the prior art of record or criticality of the instant claimed range (wherein said results must be fully commensurate in scope with the instantly claimed ranges, etc. see MPEP 716.02 d).

### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**


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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janelle Combs-Morillo whose telephone number is (571) 272-1240. The examiner can normally be reached on 8:30 am- 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JCM   
September 8, 2005

  
GEORGE WYSZOMIERSKI  
PRIMARY EXAMINER  
GROUP 1700